REMARKS

Claim 1 has been amended to incorporate the subject matter of Claim 8 and to recite that copolymer (C) comprises not less than 23.5 mass% of an aromatic vinyl compound, and has a vinyl bond content in diene compound portion of not less than 18 mass%. Support for amended Claim 1 can be found at, for example, paragraphs [0051] and [0057] of the present specification. Claim 8 has been canceled. Upon entry of this Amendment, which is respectfully requested, Claims 1-5, 7 and 9-16 will be pending.

Response to Claim Rejections Under § 103

A. Claims 1-5, 7-12 and 15-16 have been rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent No. 5,959,039 to Yokoyama et al.; and

B. Claims 1-5 and 7-16 have been rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Yokoyama in view of U.S. Patent No. 6,376,593 to Sasaka et al.

Applicants respectfully traverse.

Yokoyama discloses at col. 4, lines 12-14 that "25 or more of the value of S+(V/2) should be avoided because deterioration in the low-temperature flexibility occurs." In other words, Yokoyama teaches that when a vinyl bond content in diene compound portion (V) is 18 mass%, 16% or more of bound styrene content (S) should be avoided. Thus, Yokoyama teaches away from the copolymer (C) comprising 23.5-60 mass% of an aromatic vinyl compound and having a vinyl bond content in diene compound portion of 18-80 mass%, as claimed.

Accordingly, Yokoyama, either alone or in combination with Sasaka, fails to render obvious the present claims. Withdrawal of the rejections is respectfully requested.

C. Claims 1-5, 7-11 and 13-16 have been rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent No. 5,679,744 to Kawauzra et al.; and

D. Claims 1-5 and 7-16 have been rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Kawauzra in view of Yokoyama.

Applicants respectfully traverse.

Kawauzra fails to disclose or suggest a rubber composition comprising both the copolymer (B) having a weight average molecular weight of more than 50,000, but not more than 200,000 and the copolymer (C) having a weight average molecular weight of not less than 300,000.

In addition, according to the present invention, the high storage modulus (high G'), the low loss factor (low tan δ) and the high fracture strength (TB) can be established. However, these technical results cannot be expected from Kawauzra.

As shown in the Rule 132 Declaration by Mr. Suzuki filed on May 5, 2011, the rubber composition of Example 3, comprising the copolymer (B) having a Mw of more than 50,000 but not more than 200,000 (in particular, 80,000) and the copolymer (C) having a Mw of not less than 300,000 (in particular, 450,000) according to the present invention exhibits a fracture strength (TB) of 126 (index). In contrast, the rubber composition of Comparative Example D, comprising the copolymer (B) having a Mw of more than 50,000 but not more than 200,000 (in particular, 120,000) and the copolymer (C) having a Mw of less than 300,000 (in particular, 250,000) exhibits a fracture strength (TB) of 97 (index). Therefore, Example 3 demonstrates unexpectedly superiority at least with regard to fracture strength.

Thus, Kawauzra, either alone or in combination with Yokoyama, fails to render the present claims obvious. Accordingly, withdrawal of the rejections is respectfully requested.

E. Claims 1-5 and 7-16 have been rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over WO 2004/011545 to Masaki et al; and

F. Claims 1, 3-5 and 7-16 have been rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Masaki in view of Yokoyama.

Applicants respectfully traverse.

According to the Examiner, though Masaki discloses that styrene-isoprene has higher tackiness than styrene-butadiene, given one of ordinary skill in the art who is not interested in improving tackiness of the composition, "it would have been obvious to the one of ordinary skill in the art to use the unsubstituted butadiene, as the closest derivative and equivalent of isoprene, in the copolymer (B) of Masaki et al as well." In other words, the Examiner takes the position that it would have been obvious to one skilled in the art who is unconcerned with the object of Masaki, i.e., improve tackiness, to modify the composition of Masaki such that tackiness is decreased, and the storage modulus and loss factor are improved.

The Examiner's position lacks merit.

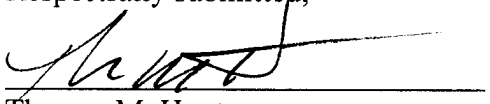
If a proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *See, In re Gordon*, 733 F.2d 900, 221 (Fed. Cir. 1984); MPEP 2141.03 V. Moreover, if the proposed modification of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. *See, In re Ratti*, 270 F.2d 810, 123; MPEP 2141.03 VI.

Given the disclosure of Masaki, modifying Masaki as the Examiner proposes would both render Masaki unsatisfactory for its intended purpose, and change its principle of operation. Thus, there is no suggestion or motivation to make the proposed modification; nor are the teachings of the references sufficient to render the claims *prima facie* obvious. Accordingly, withdrawal of the rejections is respectfully requested.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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